Publications

1. Bannerjee,R; Das,K; Das,A and Dasgupta,S : Kinetics of Silver(I) catalysed oxidation of Formic acid by (Ethylenebis(biguanide))silver(III) Cation in acid Perchlorate media.
INORGANIC CHEMISTRY,28,589,1989

2. Dasgupta,S; Das,A and Bannerjee,R: Decomposition Kinetics of Bis(biguanide)silver(III) Cation in acid Perchlorate media.
TRANSITION METAL CHEMISTRY,14(10),19,1989

3. Bannerjee,R; Das,K; Das,A and Dasgupta,S: Electrode Film from (Ethylenebis(biguanide))silver(III) Cation on Platinum.
BULLETIN OF ELECTROCHEMISTRY, 5(6),477,1989

4. Bannerjee,R; Das,A and Dasgupta,S: Kinetics of uncatalysed and Silver(I) Catalysed Hydrogen Peroxide Oxidation by (Ethylenebis(biguanide))silver(III) cation in Acid Perchlorate Media.
J. CHEM. SOC.,DALTON TRANS.,1645,1989

5. Bannerjee,R; Das,A and Dasgupta,S: Kinetics of Oxidation of Ethanol, Isopropanol and Benzyl Alcohol by (Ethylenebis(biguanide))silver(III) Cation in Aqueous perchloric acid solution.
J. Chem. SOC.,DALTON TRAN.,1207,1990

6. Bannerjee,R; Das,A and Dasgupta,S: Kinetics of Silver(I) Catalysed Oxidation of Hydrazinium ion by (Ethylenebis(biguanide))silver(III) Cation.
J. CHEM. SOC.,DALTON TRANS.,2271,1990

7. Dasgupta,S and Bannerjee,R; Tris(Salicylhydroxamato) manganese(III).
TRANSITION METAL CHEMISTRY, 18,120,1993

8. Dasgupta;S and Linert,W: 'COLORIMETRY AND SPECTROPHOTOMETRY' in "Analytical Chemistry I",
Textbook, Ed. by S.A.Iqbal, Invited writtings,1992.

9. Dasgupta,S and Linert,W: "PRINCIPLES AND METHODS OF ANALYSIS OF WATER AND WASTEWATER' in "Analytical Chemistry III",
Textbook, Ed. by S.A.Iqbal, Invited Writtings,1992.

10. Dasgupta,S; Herlinger,E and Linert,W; Complex Formation followed by Internal Electron Transfer: The Reaction of (Ethylenebis(biguanide))silver(III) with Ascorbic acid.
J.CHEM.SOC.,DALTON TRANS.,567,1993

11. Dasgupta,S; Kirkhner,K and Schmid,R: Higher Oxidation State Chemistry of Ruthenium Metallocenes.
J. CHEM. RESEARCH (S), 340,1993

12. Dasgupta,S; Vallazza,E and Schmid,R: Redox Kinetics of Metal Complexes in Nonaqueous Solutions: Reduction of Hexakis(urea)manganese(III) and Hexakis(dimethylsulfoxide)- manganese(III) by Tris(3,4,7,8-Tetramethyl-1,10-phenanthroline) iron(II) in Acetonitrile.
J. CHEM. SOC., DALTON TRANS., 2387, 1993

13. Dasgupta, S*; Sen, S; Das, R and Dasgupta, D: Dispersion Patterns of Suspended Particulate Matters from Furnaces in Glass Industries: Seasonal and Meteorological Effects.
TRANS. IND. CERAM. SOC., 53(2),44, 1994.

14. Dasgupta, S* and Sen, S; Review of Small Scale Glass Industries of Firozabad; Problems in Respect of Pollution and Remedial Suggestions.
TRANS. IND. CERAM SOC.,55(4),105,1996

15. Dasgupta, S* and Basu, A.K ; Comparative Energy Efficiency Studies between Conventional Brick and Modern Ceramic Fibre-lined Shuttle Kiln.
TRANS. IND. CERAM SOC.,56(4),107,1997

16. Dasgupta, S; Basu, A K; Chakraborty, R; Roychowdhury, A and Sen, S ; Designing of High Temperature Oil Fired Low Thermal Mass Semi-Automatic Chamber Kiln
TRANS. IND. CERAM SOC.,60(2),90,2001

17. Dasgupta, S*; Basu, A K; Chakraborty, R; Roychowdhury, A and Sen, S
Comparative Energy Efficiency Studies between the Conventional and Model Coal Fired Round Down Draught Ceramic Kiln
THE INSTITUTION OF ENGINEERS, 82(2), 2002, 42-47

18. Dasgupta, S and Das S. K; Paper Pulp Waste – A New Raw Material for the Synthesis of Porous Ceramic Composite
BULL. MATER. Sc. 25(5), 2002, 381-385

19. Dasgupta, S and Das S. K; Heat Resistant Ceramic from Paper Waste Nature India Newsletter, Page 5, March, 2003.

20. Sushmita Ghosh, Subrata Dasgupta*, Amarnath Sen and Himadri Sekhar Maiti
Low temperature synthesis of nanosized bismuth ferrite by soft chemical route,
JOURNAL OF AMERICAN CERAMIC SOC, 88(5)1349-1352(2005)

21. Sushmita Ghosh, Subrata Dasgupta*, Amarnath Sen and Himadri Sekhar Maiti,
"Low temperature synthesis of bismuth ferrite nanoparticles by ferrioxalate precursor method", MATERIALS RESEARCH BULLETIN, 40(2005)2073-2079.

22. Sushmita Ghosh, Angshuman Seal, Subrata Dasgupta*, Amarnath Sen and Himadri Sekhar Maiti;"A Novel Process of synthesis of Zinc ferrite nano particles." In Proceddings of ISAMAP2K4 held at IIT. Kharagpur during 6-8th December, 2004, pp 1567-1574.

23. Sushmita Ghosh, Subrata Dasgupta*, Amarnath Sen and Himadri Sekhar Maiti,
"Synthesis of Barium Titanate Nanopowder by a Soft Chemical Process"
Materials Letters: 61, 2 (2007) 538-541

24. R. Majumder, Sushmita Ghosh,, P. Mondal, D. Bhattacharya, Subrata Dasgupta, N. Das, A Sen, A.K.Tyagi, M. Sivakumar, T. Takami, and H. Ikuta: "Particle size dependence of magnetization and phase transition near T_N in multiferroic bismuth ferrite, J. Appl. Phys. 100, 033908 (2006).

25. Sushmita Ghosh and Subrata Dasgupta*; Synthesis, characterization and properties of nanocrystalline perovskite cathode materials by a low temperature soft chemical method, Materials Science, Poland, 28(2) 427-438 (2010).

26. Sushmita Ghosh and Subrata Dasgupta*; Synthesis, Characterization and Magnetic properties of Nickel Ferrite by soft chemical method; TRANS. IND. CERAM SOC, 69(1) 25-28 (2010).

27. P Bhattachariyaya, S Ghosh, S Majumdar, **S Dasgupta*** and S Bandyopadhyay; Comparative study on treatment of kitchen-sink wastewater using single and multichannel ceramic membrane; INT. J. ENVIRONMENTAL TECHNOLOGY AND MANAGEMENT, VOL. 13, NOS. 3/4, 336-47(2010)

28. P Bhattachariyaya, S Ghosh, S Majumdar, **S Dasgupta** and S Bandyopadhyay; Ceramic microfiltration process for treatment of herbalpharmaceutical wastewater with high organic strength; INTERNATIONAL JOURNAL OF ENVIRONMENTAL TECHNOLOGY AND MANAGEMENT; INT. J. ENVIRONMENTAL TECHNOLOGY AND MANAGEMENT, VOL. 14, NOS. 1/2/3/4, 2011

29. Marakkar Kutty P V, **Subrata Dasgupta*** and Sibdas Bandyopadhyay; Soft Chemical Synthesis of Nanosized Zinc Aluminate Spinel from the Thermolysis of Different Organic Precursors; Materials Science, Poland, 29(2)2011, 121-126

30. Marakkar Kutty P V and Subrata Dasgupta* ; Low Temperature Synthesis of Nanocrystalline Magnesium Aluminate Spinel by a soft chemical method; Ceramics International; 39(2013)7891-7894.

31. Debaleena Bhattacharjee, Subrata Dasgupta* and Sibdas Bandyopadhyay: Rectangular Palladium Nanoparticles (RNPs): Synthesis, Characterization and Mechanistic Studies: Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry : 43:1323–1328, 2013**.**

32. Kaustab Mandal, Debaleena Bhattacharjee, Partha Sarathi Roy, Swapan Kumar Bhattacharya* and Subrata Dasgupta*: "Room temperature synthesis of Pd-Cu nanoalloy catalyst with enhanced electrocatalytic activity for the methanol oxidation reaction": *Applied Catalysis A: General*, **492**, 2015, 100-106

33. Parthasarathi Mukherjee, Partha Sarathi Roy, Kaustab Mandal, Debaleena Bhattacharjee, Subrata Dasgupta*, , Swapan Kumar Bhattacharya*; "Improved catalysis of room temperature synthesized Pd-Cu alloy nanoparticles for anodic oxidation of ethanol in alkaline media"; *Electrochimica Acta*, **154**, 2015, 447-455

34. Kaustab Mandal, Debaleena Bhattacharjee and Subrata Dasgupta*;" Synthesis of nanoporous PdAg nanoalloy for hydrogen generation from formic acid at room temperature"; *International Journal of Hydrogen Energy*, 40 (2015) 4786-4793

35. Debaleena Bhattacharjee, Kaustab Mandal and Subrata Dasgupta*; "High performance nickel palladium nanocatalyst for hydrogen generation from alkaline hydrous hydrazine at room temperature"; Journal of Power Sources 287 (2015) 96-99

36. Debaleena Bhattacharjee and Subrata Dasgupta * ; "Trimetallic NiFePd nanoalloy catalysed hydrogen generation from alkaline hydrous hydrazine and sodium borohydride at room temperature"; ***Journal of Materials Chemistry A***, 2015, **3**, 24371 - 24378, DOI: 10.1039/C5TA05814G

37. Debaleena Bhattacharjee, Kaustab Mandal and Subrata Dasgupta*; "Hydrazine assisted catalytic hydrogenation of PNP to PAP by NixPd100-x nanocatalyst" ; ***RSC Advances***, 2016, 6, 64364 (DOI: 10.1039/C6RA11141F)

38. Debaleena Bhattacharjee, Sreya Roy Chowdhury, Swapan Kumar Bhattacharya and SubrataDasgupta[a]*: "Room Temperature Synthesis of PdxNi100-x Nano Alloy: Superior Catalyst for Electro-Oxidation of Methanol and Ethanol": **Journal of Applied Electrochemistry:** 2019, 49 (7), 681-691.

39. Moumita Debroy, Mrinal Kanti Dolai, Trilochan Prasad Sahoo, Subrata Dasgupta, Mahesh Kumar Gagrai; Synthesis of rare earth metal oxide nanoparticle for simultaneous removalof fluoride and As(III) from aqueous solution; Groundwater for Sustainable Development 12 (2021) 100512

Conference Papers

1. Sushmita Ghosh, Subrata Dasgupta, Amarnath Sen , "A Novel Process for Synthesis of Bismuth Ferrite Nanoparticles" : International Conference of "Nanomaterial, systhesis, Characterization and application", presented in Taj Bengal, Kolkata., 4th to 6th November, 2004

2. Ranabrata.Mazumder, , Angshuman Seal, Subrata Dasgupta, Amarnath Sen, "Low Temperature Synthesis of Nanocrystalline Lead Zirconate Titanate (PZT) Powder by Wet Chemical Method"; International Conference of "Nanomaterial, systhesis, Characterization and application", presented in Taj Bengal, Kolkata., 4th to 6th November, 2004

3. Sourja Ghosh, Subrata Dasgupta and Sibdas Bandyopadhyay; Ceramic Membrane contactors for CO_2 capture; 9th International Conference on Catalysis in Membrane Reactors, 28th June -2nd July, Lyon, France; S06-P05, pp. 185-186, 2009

4. . Sourja Ghosh, Subhendu Sarkar, Subrata Dasgupta and Sibdas Bandyopadhyay; Ceramic Capillary and Hollow Fibre Membrane for CO_2 capture; International Workshop on Advances in Membrane Technology for Water Treatment, Environment and Clean Energy, 7th -8th December, Central Glass & Ceramic Research Institute, Kolkata, pp 34-36, 2009

5. Sourja Ghosh, Subrata Dasgupta and Sibdas Bandyopadhyay; Membrane Contactors- An Alternative Technology for CO_2 capture; All India Seminar on Global Warming Corporate Responsibility, 10^{th} -11^{th} November, The Institution of Engineers (India), Kolkata, pp 108-109, 2009

6. Nandini Das, Subrata Dasgupta, S. N. Roy and Sibdas Bandyopadhyay; Nanostructured Ceramic Materials for Separation Application; Proceedings of 4^{th} National Conference on Nanomaterials & Nanotechnology, December 21-23, 2011; Lucknow Journal of Science, Volume 8, No. 2, 2011, pp. 1-5

7. Sourja Ghosh, Marakkar Kutty, Subrata Dasgupta and Sibdas Bandyopadhyay*; "Role of Absorbents In Ceramic Membrane Based Contactor System For CO2 Capture"; 10^{th} International Conference on Catalysis in Membrane Reactors, ICCMR 10, St.Petersburg/Russia, 20th-24th June, 2011, 109-110.

8.Marakkar, P.V., Ghosh, S., Dasgupta, S., Bandyopadhyay, S. 'Membrane contactors for dissolution of CO_2 in water', International Symposium on the Energy Materials: Opportunities and Challenges (ISEM 2011) March 1-2, 2011, CGCRI Kolkata.

9. Debaleena Bhattacharjee and Subrata Dasgupta* ; "Synthesis and Mechanistic Studies of Rectangular Palladium Nanoparticles; International Workshop on Recent Advancement in Membranes for Liquid & Gas Filtration, December 27th, Central Glass & Ceramic Research Institute, Kolkata, 2012

10. P.V. Marakkar Kutty, Sourja Ghosh, Subhendu Sarkar, Subrata Dasgupta and Sibdas Bandyopadhyay; "Ceramic Membrane based gas-liquid contactor for CO_2 Capture ";International Workshop on Recent Advancement in Membranes for Liquid & Gas Filtration, December 27th, Central Glass & Ceramic Research Institute, Kolkata, 2012

11. P.V. Marakkar Kutty, Sourja Ghosh, Subhendu Sarkar, Sibdas Bandyopadhyay and Subrata Dasgupta ; "Ceramic Membrane contactor for mineralization of CO_2 Capture; International Conference on Membranes and Applications, November 22-23, 2013, pp. 55-56, Central Glass & Ceramic Research Institute, Kolkata

12. Debaleena Bhattacharjee, Kaustab Mandal, Trilochan Prasad Sahoo, Subrata Dasgupta* ; Pd Membrane of Tunable Thickness: Room Temperature Synthesis and Characterization; International Conference on Membranes and Applications, November 22-23, 2013, pp. 91-92, Central Glass & Ceramic Research Institute, Kolkata

13. Kaustab Mandal[a], Debaleena Bhattacharjee[a], Partha Sarathi Roy[b], Swapan Kumar Bhattacharya[b] and Subrata Dasgupta[a]; Pd-Cu nanoalloy: A superior catalyst for fuel cell application; International Conference on Membranes and Applications, November 22-23, 2013, pp. 41-42, Central Glass & Ceramic Research Institute, Central Glass & Ceramic Research Institute, Kolkata

14. Trilochan Prasad Sahoo and Subrata Dasgupta*; Synthesis and characterization of inorganic asymmetric tubular hollow fibre membrane; 1^{st} International Conference on alumina and other functional ceramics (AOFC-2015), March 11-13, 2015, pp. 96, Central Glass & Ceramic Research Institute, Central Glass & Ceramic Research Institute, Kolkata

15. Kaustab Mandal, Debaleena Bhattacharjee, Parthasarathi Mukherjee, Partha Sarathi Roy, Swapan Kumar Bhattacharya* and Subrata Dasgupta*;Room temperature synthesis of Pd-Cu nanoalloy catalyst with enhanced electrocatalytic activity for direct alcohol fuel cell application; 1st International Conference on alumina and other functional ceramics (AOFC-2015), March 11-13, 2015, pp. 97, Central Glass & Ceramic Research Institute, Central Glass & Ceramic Research Institute, Kolkata

16. Debaleena Bhattacharjee, Trilochan Prasad Sahoo, Kaustab Mandal and Subrata Dasgupta*; Ceramic Supported Palladium Membrane: A clean energy initiative towards hydrogen separation; 1st International Conference on alumina and other functional ceramics (AOFC-2015), March 11-13, 2015, pp. 74, Central Glass & Ceramic Research Institute, Central Glass & Ceramic Research Institute, Kolkata

17. Debaleena Bhattacharjee, Trilochan Prasad Sahoo, Kaustab Mandal and Subrata Dasgupta*; Bimetallic Nanocatalysts for room temperature hydrogen generation; Indian Innovation in Materials Research: New Materials and processes (IIMR-15); June 25-27, 2015, pp76, Central Glass & Ceramic Research Institute, Central Glass & Ceramic Research Institute, Kolkata

18. Debaleena Bhattacharjee, Trilochan Prasad Sahoo, Kaustab Mandal and Subrata Dasgupta; Towards the development of ultrathin Palladium Membrane over ceramic substrate for Hydrogen separation: Third International Conference on Membranes (ICM-2015); 21–24 August 2015, Center for Environment Education and Technology, Kottayam, Kerala, India

19. Sourja Ghosh, Subhendu Sarkar, Nandini, Das, Subrata Dasgupta and Sibdas Bandyopadhyay; "Membrane Contactors for Post Combustion CO_2 Capture and Strategies for Clean Energy Production"; Indo - Norwegian Seminar, Indian Institute of Petroleum, Dehradun, India; 01/2010

20. Sujay Ghosh, Sankar P parua, Debaleena Bhattacharjee, Trilochan Prasad Sahoo and Subrata Dasgupta*; "Non-noble Bimetallic Nanoparticle catalysed hydrogen generation from Hydrazine Hydrate ; 2nd International Conference on alumina and other functional ceramics (AOFC-2017), February 15-17, 2017, Central Glass & Ceramic Research Institute, Central Glass & Ceramic Research Institute, Kolkata

21. Subhrajit Roy, Lity Alen Varghese, Subrata Dasgupta, Mahesh Kumar Gagrai , "Synthesis and Characterisation of Catalyst for Biodiesel Production from Waste Cooking Oil"presented at"IEEE- International Conference on Engineering Science & Advance Research at Faculty of Engineering & Technology, Rama University, Kanpur, India, during 13-15th March, 2019. Winner of oral presentation.

22. Subhrajit Roy, Mahesh Kumar Gagrai , T P Sahoo, S Dasgupta, "Heterogeneous catalyst for biodiesel production from waste cooking oil" presented at Advances in Chemical Engineering and Science 2019 (ACES 2019) during March 07th – 08th, 2019 at the Department of Chemical Engineering, Indian Institute of Science Education and Research Bhopal, Madhya Pradesh, India.

23. Saheli Bhattacharjee, Rupam Saha, Pallabi Bannerjee and Subrata Dasgupta* "Hydrophobic Modification of Tubular Ceramic Membranes for Membrane Distillation" presented at International Conference on multifunctional and hybrid compositematerials for energy, environment and medical applications ICMHCEE 2019); National Institute of Technology, Tiruchirapalli, Tamil Nadu, during 9-11th September, 2019

25. Trilochan Prasad Sahoo, Saheli Bhattacharjee, Mahesh Kumar Gagrai & Subrata Dasgupta* : "A Process of Defluoridation of Groundwater using Domestic and Industrial Waste coupled with Membrane Technology" presented at International Conference on multifunctional and hybrid compositematerials for energy, environment and medical applications ICMHCEE 2019); National Institute of Technology, Tiruchirapalli, Tamil Nadu, during 9-11th September, 2019

25. Moumita Roy, Ravi Kumar R, T P Sahoo, Subrata Dasgupta*, Mahesh Kumar Gagrai*; "Isotherm Models for Cerium based Adsorbent towards Fluoride Removal from Groundwater"" presented at International Conference on multifunctional and hybrid compositematerials for energy, environment and medical applications ICMHCEE 2019); National Institute of Technology, Tiruchirapalli, Tamil Nadu, during 9-11th September, 2019

26. RupamSaha, SaheliBhattacharjee,Pallabi Banerjee, MoumitaDebroy, T P Sahoo, M K Gagrai, S Dasgupta; "Preparation and Characterization of Clay-Alumina Supported Hydrophobic Membrane"International Conference on Advanced Nanomaterials (ICAN-2020),Faculty of Engineering &Technology, Rama University, Kanpur, India, 27 - 29 February 2020

27. MoumitaDebroy,,RupamSaha ,SaheliBhattacharjee, Pallabi Banerjee, T P Sahoo,Subrata Dasgupta, Mahesh Kumar Gagrai;"Role of Intermediate Inorganic OxideCoating onto Ceramic Support for Hydrophobic Membrane: A comparative study"; International Conference on Advanced Nanomaterials (ICAN-2020),Faculty of Engineering &Technology, Rama University, Kanpur, India, 27 - 29 February 2020

Patents

1. Dasgupta, S; Dhar, N. N; Sen, S and Bannerjee, G; "A Composition for making Solid Fuel from Industrial and Agricultural Waste and a Process for making Solid Fuel thereof". No. 197248 dated 11/08/2006.

2. Dasgupta, S; "A Process of making Ceramic Extraction Thimble from Industrial Waste Material."
No. 232873 dated 21/03/2009

3. Dasgupta, S; Sen, S and Dhar, N. N; "A synergistic composition useful for making art objects and idols from industrial and agricultural waste and a process of making art objects and idols thereof."
No. 232341 232341 dated 16/03/2009.

4. Dasgupta, S; Das, S. K , Bannerjee, G, Dhar, N. N, Mondal, P. K. and Mukherjee, S; "A PROCESS FOR THE PREPARATION OF POROUS REFRACTORY AGGREGATE." No. 220187 dated 16/05/2008.

5. Ghosh, S; Dasgupta, S; Sen, A and Maiti, H. S; "
A PROCESS FOR MANUFACTURING MAGNETOELECTRIC BISMUTH FERRITE" No. 247636 dated 28/04/2011.

6. Chakraboty.S, Ghosh.S, Dasgupta.S, Sen.A, " A method of manufacturing semiconducting combustible gas sensors in thin film form on silica substrate", Indian Patent Appl. No. 2597/DEL/05, Dated: 27.09.05.

7. Chakraboty.S, Guha A, Halder A. K, Mondal J, Das N, Dasgupta S, Sen.A, Maiti H. S: " A method of improving response and recovery time of semiconducting tin oxide based sensors in thick film form for detection of combustible gases"
Indian Patent Appl. No. 674/DEL/06, Dated:10.03.06.

8. DASGUPTA SUBRATA, BHATTACHARJEE DEBALEENA, MANDAL KAUSTAB, SAHOO TRILOCHAN PRASAD "A process for the preparation of an impervious Palladium membrane over ceramic substrate"

Indian Patent No. 2461DEL2013 Dated 20.08.2013, 324557 dated 06.11.2019.

9. Subrata Dasgupta, Kaustab Mandal and Debaleena Bhattacharjee: A process of making bimetallic Palladium based nanoporous alloy for hydrogen generation from small organic molecules at near ambient temperature; Indian Patent Appl. Indian Patent Appl. No. 0622DEL2015 Dated 05.03.2015